

JOHN BEL EDWARDS
GOVERNOR



CHUCK CARR BROWN, PH.D.
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL ASSESSMENT

NOV 02 2020

Michael Torres, Remedial Project Manager
U.S. Environmental Protection Agency Region 6
1445 Ross Avenue, 6FS-OS
Dallas, Texas 75214

RE: Organotins - Constituents of Potential Concern
Remedial Investigation/Feasibility Study
SBA Shipyard Superfund Site; **AI Number 1478**
9040 Castex Landing Road
Jennings, Jefferson Davis Parish, LA

Dear Mr. Torres:

In recent teleconference calls between your office, the PRP Group and the Louisiana Department of Environmental Quality-Remediation Division (LDEQ-RD), this office has expressed our concern over the possibility of organotin compounds being present at the SBA Shipyard Superfund Site in Jennings, Jefferson Davis Parish, Louisiana (AI: 1478). At your request, we are providing a formal request to add these compounds to the list of Constituents of Potential Concern (COPC) along with the rationale for this request.

Organotins (OTs) such as tributyltins (BTs) and triphenyltins, were the major species of OTs used as biocides in antifouling paints applied to boat hulls. Even though the use of these chemicals was internationally banned in 2008, they can still be detected in aquatic environments. The deleterious effects of OTs upon wildlife and experimental animals are well documented and include endocrine disruption, immunotoxicity, neurotoxicity, genotoxicity, and metabolic dysfunction. Of particular concern are the effects of tributyltin (TBT) upon benthic crustaceans. Benthic crustaceans such as crawfish make up a large amount of human seafood consumption in the state of Louisiana, and are harvested both commercially and recreationally. Along with other benthic organisms, they also provide a source of food for higher trophic levels of both aquatic and terrestrial organisms. Tributyltin and other OTs have been found to bioaccumulate in organisms, and some OTs biomagnify as they progress up the food chain.

Because graving docks are a documented source of organic metals as well as other toxic metals at shipyards throughout the southern United States, including Louisiana, LDEQ has the concern that they may also be present at the graving dock and other painting areas at SBA Shipyard. This class of compounds drove risk at the Southern Shipbuilding Superfund Site in Slidell, where excavation and incineration, followed by sub-aqueous capping were needed to address the

Michael Torres, USEPA

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graving dock area. The presence of tributyltin was not initially suspected there since reported practices at the site did not include tributyltin-related activities.

Historical records show past activities at SBA Shipyard included sandblasting and painting of hulls of in-shore and ocean-going vessels, as well as improper release and disposal of paint and paint waste on site. There is the possibility of OTs were either applied, removed, and/or disposed of on the site.

Based upon the historical activities at this site, and the those of similar sites both in Louisiana and other coastal states, and taking into consideration the toxic nature of this group of contaminants the Louisiana Department of Environmental Quality – Remediation Division requests that the United States Environmental Protection Agency require the PRP group to prepare a sampling and analysis plan to determine if OTs are present in soils and sediments near the graving dock and other areas where sandblasting and painting occurred at SBA Shipyard, and if so to what extent. If OTs are detected at the site, they will need to be addressed in the biota tissue sampling and analysis protocol.

Please submit all future correspondence from the PRP group in triplicate, with the **AI number (1478)** included to:

Estuardo Silva, P.G.
Administrator
Remediation Services Division
P.O. Box 4314
Baton Rouge, LA 70821-4314.

If you have any questions, please feel free to contact Mr. Tommy Doran of my staff via email at tommy.doran@la.gov, or by phone at (225) 219-3019.

Thank you for your cooperation.

Sincerely,



Estuardo Silva, P.G.
Administrator
Remediation Division

htd

c: Imaging Operations – IAS

References:

Hoch M., Organotin compounds in the environment: a review. *Appl Geochem* (2001) 16:719–43. doi:10.1016/S0883-2927(00)00067-6

Graceli JB, Sena GC, Lopes PFI, Zamprogno GC, da Costa MB, Godoi AFL, et al., Organotins: a review of their reproductive toxicity, biochemistry, and environmental fate. *Reprod Toxicol* (2013) 36:40–52. doi:10.1016/j.reprotox.2012.11.008

USEPA, SOUTHERN SHIPBUILDING, SLIDELL, LA - Cleanup Activities
(<https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=0601494#bkground>)

USEPA, HRS DOCUMENTATION RECORD – SBA Shipyard
(<https://semspub.epa.gov/work/06/300408.pdf>)

USEPA Superfund Record of Decision Southern Shipbuilding, 1997
(<https://nepis.epa.gov/Exe/ZyPDF.cgi/P1002MH1.PDF?Dockey=P1002MH1.PDF>)

USEPA Survey of Sediment Quality in the Duluth/Superior Harbor: 1993 Results
(<https://nepis.epa.gov/Exe/ZyPDF.cgi/P100CY2T.PDF?Dockey=P100CY2T.PDF>)

REVISED FINAL (100 PERCENT) DESIGN LOCKHEED WEST SEATTLE SUPERFUND SITE REMEDIAL ACTION, SEATTLE, WASHINGTON
(<https://www.lockheedmartin.com/content/dam/lockheed-martin/ea/documents/remediation/seattle/100-design-july2018.pdf>)

Lee CC, Hsu YC, Kao YT, Chen HL., Health risk assessment of the intake of butyltin and phenyltin compounds from fish and seafood in Taiwanese population. *Chemosphere* (2016) 164:568–75. doi:10.1016/j.chemosphere.2016.08.141

Sant'Anna BS, Santos DM, Marchi MRR, Zara FJ, Turra A., Surface-sediment and hermit-crab contamination by butyltins in southeastern Atlantic estuaries after ban of TBT-based antifouling paints. *Environ Sci Pollut Res* (2014) 21:6516–24. doi:10.1007/s11356-014-2521-8

Cristale J, Dos Santos DM, Sant'Anna BS, Sandron DC, Cardoso S, Turra A, et al., Tributyltin in crustacean tissues: analytical performance and validation of method. *J Braz Chem Soc* (2012) 23:39–45. doi:10.1590/S0103-50532012000100007

LDEQ – EDMS Records

August 9, 1971 Letter address to the Louisiana Air Control Commission
(<https://edms.deq.louisiana.gov/app/doc/view.aspx?doc=2218047&ob=yes&child=yes>)

September 16, 1980 Letter sent to USEPA Region VI from Louis Smaihall.
(<https://edms.deq.louisiana.gov/app/doc/view.aspx?doc=837609&ob=yes&child=yes>)

January 29, 1993 LDEQ Compliance Order for improper disposal of waste paint on site.
(<https://edms.deq.louisiana.gov/app/doc/view.aspx?doc=837966&ob=yes&child=yes>)



OFFICE OF ENVIRONMENTAL ASSESSMENT
REMEDIAL DIVISION
Routing/Approval Slip

RD-0-33



AI No.	1478	Facility	SBA Shipyard Superfund	Date Routed:	10/28/2020
Other ID No.		Location:	9040 Casley Landing Road		
Activity No.		Originator:	Edwin - for Tommy Doran		
Section/Group:		Attachments:	Letter for Admin's Signature		
Description/Type of Document(s):					

Closure ☐ Comfort Letter ☒ Correspondence ☐ Corrective Action ☐ Conveyance Notice ☐
NFA ☐ NOD ☐ Personnel ☐ Other ☐

Technical Review	Req'd.	Initials	Date	Return to Originator?	Comments
Environmental Scientist	<input checked="" type="checkbox"/>	KJD	10/29/20	<input type="checkbox"/> Y <input type="checkbox"/> N	
Geology	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Legal	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Technical Advisor	<input checked="" type="checkbox"/>	LL	11/2/20	<input type="checkbox"/> Y <input type="checkbox"/> N	
Other (SR.EJ)	<input checked="" type="checkbox"/>	KKK	10/30/20	<input type="checkbox"/> Y <input type="checkbox"/> N	
Additional Comments					

Management Review	Req'd.	Initials	Date	Return to Originator?	Comments
Supervisor	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Manager	<input checked="" type="checkbox"/>	ECA	10/28/2020	<input type="checkbox"/> Y <input type="checkbox"/> N	
Administrator	<input checked="" type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Confidential Advisor To The Secretary	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Assistant Secretary	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Undersecretary	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Secretary	<input type="checkbox"/>			<input type="checkbox"/> Y <input type="checkbox"/> N	
Additional Comments: After Admin's Signature, date stamp, Scan a copy to Tommy Doran					

☐ TEMPO Data Entry Completed (Date Document Completed): _____